

thermoplastic or a thermosetting resin. Support for amended claim 1 can be found, for example, on page 14, lines 1-10 of the specification. Claim 6 has been amended to delete the recitation of the possible materials for use as the conductive filler, and to include the limitation original set forth in claim 4. Claim 9 has been amended to recite that the coating containing the conductive filler is provided on the entire surface of the external electrode. Support for amended claim 9 can be found, for example, on page 10, lines 19-21 and Fig. 1 of the specification. With regard to the new claims, new claim 18 substantially tracks original claim 1 combined with portions of original claims 2 and 4. New claims 19-22 correspond to original claim 13. New claims 23-26 correspond to original claim 14. New claim 27 recites the same limitation as added to claim 9. No new matter has been added.

Applicants note with appreciation the indication of allowable subject matter being recited by claim 4.

In addition, Applicants have amended the specification to correct an inadvertent error contained therein.

For the reasons set forth below, it is respectfully submitted that all pending claims are patentable over the cited prior art.

II. The Rejection Of Claims 1-3, 5-9 And 13-17

Claims 1-3, 5-9 and 13-17 were rejected under 35 U.S.C. § 103 as being obvious over USP No. 6,262,785 to Ikeda, in view of USP No. 5,822,176 to Sano, and further in view of USP No. 5,952,717 to Taniguchi and USP No. 5,277,723 to Kodama. For the

following reasons, it is respectfully submitted that all pending claims are patentable over the cited prior art.

First, with regard to claim 1, the claim recites that the coating disposed on the external electrode includes a thermoplastic or thermosetting resin. Turning to the cited prior art, Ikeda is relied upon as disclosing the application of a resin on the external electrode. However, the external electrode 5 of Ikeda is a sintered conductive paste, and therefore contains a sintered metal body, but does not contain a resin ingredient. As set forth on col. 3, lines 15-18 of Ikeda, the external electrode 5 is made from a sintered metal body of Ag/Pd and a photocatalyst TiO_2 . However, the external electrode does not contain any thermoplastic or thermosetting resin. While the conductive paste of Ikeda contains a binder ingredient, the binder evaporates when sintered and does not leave any resin in the final electrode. Thus, contrary to the claimed invention, there is no resin, much less thermoplastic or thermosetting, that remains in external electrode 5.

It is further noted that the conductive adhesive 11 of Ikeda cannot be deemed to correspond to the claimed coating disposed on the external electrode. The conductive adhesive 11 of Ikeda functions to couple the external electrode 5 of Ikeda to the electrode 9. As such, the conductive adhesive 11 of Ikeda is similar to the conductive adhesive layer 5 of the present invention. Indeed, if the conductive adhesive 11 of Ikeda is asserted to correspond to the claimed coating disposed on the external electrode, then it is clear that Ikeda fails to disclose any component corresponding to the conductive adhesive layer 5 of the present invention, which is recited for example,

in pending claim 2.

Furthermore, none of the remaining prior art references are relied upon as disclosing the foregoing aspect of the present invention, and indeed, none appear to do so.

Accordingly, as each and every claim limitation must be disclosed or suggested by the cited prior art in order to substantiate a *prima facie* case of obviousness (see, M.P.E.P. § 2143.03), and for the foregoing reasons it is clear that the cited combination of prior art does not do so, it is respectfully submitted that claim 1, and the claims dependent thereon are patentable over the cited prior art.

Turning to claim 6, this claim recites in-part that the thickness of the coating formed on the external electrode is less than the particle diameter of the conductive filler disposed in the conductive adhesive. As the limitation was set forth in original claim 4, and was indicated to be allowable, it is respectfully submitted that amended claim 6 is allowable for the same reasons.

Turning to claim 9, this claim recites that the coating of a conductive adhesive disposed on the external electrode contains a conductive filler, and more importantly, that the coating is disposed on the entire surface of the external electrode (as shown, for example, in Figs. 1 and 2 of the present invention). Turning to the prior art, it is clear that Ikeda does not disclose an external electrode having a conductive coating disposed on the entire surface thereof. Nor does any of the other prior art appear to cure this deficiency of Ikeda. Accordingly, it is respectfully submitted that claim 9 is patentable over the cited prior art.

New claim 18 is a combination of original claims 1, 2 and 4. It is respectfully submitted that, at a minimum, new claim 18 is allowable for the reason that claim 1 is allowable as well as for the reason that claim 4 is allowable.

III. All Dependent Claims Are Allowable Because The Independent Claim From Which They Depend Are Allowable

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, ***Hartness International Inc. v. Simplimatic Engineering Co.***, 819 F.2d at 1100, 1108 (Fed. Cir. 1987).

Accordingly, as claims 1, 6, 9 and 18 are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also in condition for allowance.

IV. Request For Notice Of Allowance

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Serial No.: 09/747,976

Respectfully submitted,

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APPENDIX ILLUSTRATING AMENDMENTS

IN THE SPECIFICATION:

Please amend the paragraph starting at page 11, line 12 of the specification to read as follows:

--The conductive filler which contributes to conduction of electricity in the conductive adhesive is electrically connected to the external electrode 3 by breaking through the adhesive layer 6 to abut against the external electrode 3. Therefore, when the thickness of the adhesive layer 6 is not set less than the particle diameter of the conductive filler, the conductive filler does not break through the adhesive layer 6 to abut surely against the external electrode 3 and causes a poor conduction. For such a reason, the thickness of the adhesive layer 6 is [not] set less than the particle diameter of the conductive filler contained in the connecting element 5.--

IN THE CLAIMS:

Please delete claims 5 and 10-17, without prejudice, and amend claims 1, 6 and 9 to read as follows:

1. (Amended) An electronic part [,] comprising:

an external electrode; and

[wherein] a coating including a thermoplastic or thermosetting [containing] resin [ingredient is provided] disposed on [the] a surface of [an] said external electrode [thereof].

6. (Amended) An electronic part mounting element comprising:
an electronic part;
a coating containing a resin ingredient and formed on a surface of an external electrode of said electronic part;
an element to be mounted with said electronic part; and
a conductive adhesive containing a conductive filler [consisting of gold, silver, platinum, nickel, zinc, palladium, or an alloy or a mixture containing these metals and] for electrically connecting the external electrode of said electronic part to a connecting terminal of said element to be mounted,
wherein the thickness of said coating is less than the particle diameter of said conductive filler.

9. (Amended) An electronic part mounting element[,] comprising:
an external electrode;
[wherein] a coating of a conductive adhesive containing a conductive filler [consisting of gold, silver, platinum, nickel, zinc, palladium, or an alloy or a mixture containing these metals is] formed on the entire surface of the external electrode of the electronic part, [and]
wherein said external electrode of said electronic part is electrically connected to a [the] connecting terminal of an element on which said electronic part is to be mounted, [utilizing] said coating operative as a connecting element for connecting said external electrode to said connecting terminal.

Please add new claims 18-27 as follows:

--18. An electronic part comprising:

an external electrode;

a coating including a thermoplastic or thermosetting resin ingredient is provided disposed on a surface of said external electrode; and

a conductive filler is disposed on said coating;

wherein the thickness of said coating is less than the particle diameter of said conductive filler.

19. The electronic part as set forth in claim 1, wherein the surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 10.0 μ m.

20. The electronic part mounting element as set forth in claim 6, wherein the surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 10.0 μ m.

21. The electronic part mounting element as set forth in claim 9, wherein the surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 10.0 μ m.

22. The electronic part as set forth in claim 18, wherein the surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 10.0 μ m.

23. The electronic part as set forth in claim 1, wherein the surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 5.0 μ m.

24. The electronic part mounting element as set forth in claim 6, wherein the surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 5.0 μ m.

25. The electronic part mounting element as set forth in claim 9, wherein the

surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 5.0 μ m.

26. The electronic part as set forth in claim 18, wherein the surface roughness (Ra) of said external electrode of is in the range of 0.1 μ m to 5.0 μ m.

27. The electronic part as set forth in claim 1, wherein said coating is disposed over the entire surface of said external electrode.--